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# NOTICE OF ALLOWANCE AND FEE(S) DUE

22245

7590

02/11/2004

NAVAL MEDICAL RESEARCH CENTER ATTN: (CODE 00L) 503 ROBERT GRANT AVENUE SILVER SPRING, MD 20910-7500 EXAMINER SHAHNAN SHAH, KHATOL S

PAPER NUMBER

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1645

ART UNIT

DATE MAILED: 02/11/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747.521	12/21/2000	Darrel R. Galloway	22727/04079	9991

TITLE OF INVENTION: METHODS FOR PROTECTION AGAINST LETHAL INFECTION WITH BACILLUS ANTHRACIS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	05/11/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

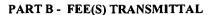
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.





Complete and send this form, together with applicable fee(s), to: Mail

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or Fax (703) 746-4000

appropriate. All further coindicated unless corrected maintenance fee notification		Patent, advance on in Block 1, by (a)	ders and notification of the specifying a new	n of maintenance fees	will be mailed to the current	correspondence address as
CURRENT CORRESPONDE	NCE ADDRESS (Note: Legibly mark-up	with any corrections or	use Block 1)	Fee(s) Transmittal, Tl	f mailing can only be used for his certificate cannot be used	for any other accompanying
22245	7590 02/11/2004			naners Each addition	al paper, such as an assignmente of mailing or transmission.	ent or formal drawing, mus
NAVAL MEDIO ATTN: (CODE 0 503 ROBERT GR	CAL RESEARCH CE 0L) RANT AVENUE	ENTER		Ce I hereby certify that t States Postal Service addressed to the Ma	ertificate of Mailing or Transhis Fee(s) Transmittal is bein with sufficient postage for fir il Stop ISSUE FEE address PTO, on the date indicated bel	g deposited with the United est class mail in an envelope above, or being facsimile
SILVER SPRING	6, MD 20910-7500			transmitted to the OS	10, on the date maleated bei	(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVI	INTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,521	12/21/2000		Darrel R. Gallo	•	22727/04079	9991
TITLE OF INVENTION:	METHODS FOR PROTECTI	ON AGAINST LE	THAL INFECTION	N WITH BACILLUS A	NTHRACIS	
APPLN. TYPE	SMALL ENTITY	ISSUE FE	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	) ·	\$300	\$1630	05/11/2004
EXA	MINER	ART UN	ır	CLASS-SUBCLASS	7	
SHAHNAN SI	HAH, KHATOL S	1645	•	424-190100	_	
1. Change of correspondent CFR 1.363).	nce address or indication of "Fe	ee Address" (37		on the patent front page		
Address form PTO/SB/	dence address (or Change of C 122) attached. tion (or "Fee Address" Indicat or more recent) attached. Use	tion form	agents OR, alte firm (having as agent) and the	rnatively, (2) the name a member a registered names of up to 2 regis ents. If no name is liste	of a single attorney or 2 tered patent	
PLEASE NOTE: Unles	ID RESIDENCE DATA TO B ss an assignee is identified bel ted to the USPTO or is being s NEE	low, no assignee da submitted under sep	ata will appear on oparate cover. Comp	he patent. Inclusion of a	T a substitute for filing an ass	ate when an assignment has ignment.
Please check the appropria	te assignee category or catego	<u> </u>	•		corporation or other private gr	roup entity 🚨 government
4a. The following fee(s) ar	re enclosed:	4b	. Payment of Fee(s		aland	
☐ Issue Fee☐☐ Publication Fee☐☐				mount of the fee(s) is en		
	f Copies		☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).			
Director for Patents is requ	nested to apply the Issue Fee an	nd Publication Fee				
(Authorized Signature)		(Date)	<del>-</del> -			
NOTE; The Issue Fee a other than the applicant interest as shown by the	nd Publication Fee (if requir; a registered attorney or agreecords of the United States Pa	ed) will not be accent; or the assigned	cepted from anyon se or other party i k Office.	e n		
obtain or retain a benchi application. Confidential estimated to take 12 min completed application for case. Any comments or suggestions for reducing Patent and Trademark 22313-1450. DO NOT SEND TO: Commissione	nation is required by 37 CFR it by the public which is to fi ity is governed by 35 U.S.C. I nutes to complete, including grow to the USPTO. Time will in the amount of time you it this burden, should be sent Office, U.S. Department SEND FEES OR COMPLE er for Patents, Alexandria, Virgander of the complete of the comple	ale (and by the US. 22 and 37 CFR 1.1 athering, preparing II vary depending require to complet to the Chief Information of Commerce, A. TED FORMS TOginia 22313-1450.	1910 to process) a 14. This collection in 15. and submitting the 16. upon the individual 16. te individu	n S S E L I I I		



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09/747,521	12/21/2000	Darrel R. Galloway	Darrel R. Galloway 22727/04079		
22245	7590 02/11/2004		EXAMINER		
NAVAL MED	ICAL RESEARCH CEN	SHAHNAN SHAH, KHATOL S			
ATTN: (CODE 503 ROBERT C	00L) GRANT AVENUE	ART UNIT	PAPER NUMBER		
	IG, MD 20910-7500	•	1645		
			DATE MAII ED: 02/11/200	4	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
N. A. C. A. L.	09/747,521	GALLOWAY ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Khatol S Shahnan-Shah	1645	
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS	
1. This communication is responsive to the interview of 11/19	9/2003 and amendment of 12/18/20	<u>03</u> .	
2.  The allowed claim(s) is/are 24, 26,27,31,41, 42, 45-50 and	d 53 renumbered claims 1-13 respe	<u>ctively</u> .	
3. The drawings filed on 12 December 2002 are accepted by	the Examiner.		
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority und</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ul>	ler 35 U.S.C. § 119(a)-(d) or (f).		
<ol> <li>Certified copies of the priority documents have</li> </ol>	been received.		
2. Certified copies of the priority documents have	been received in Application No.	·	
<ol> <li>Copies of the certified copies of the priority doc International Bureau (PCT Rule 17.2(a)).</li> </ol>	-		
* Certified copies not received:			
5. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. § 119(e) (to a provision	onal application).	
(a) The translation of the foreign language provisional a	pplication has been received.		
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. §§ 120 and/or 121.		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the submitted of the submi	this application. THIS THREE-MON  itted. Note the attached EXAMINER	TH PERIOD IS NOT EXTENDABLE 'S AMENDMENT or NOTICE OF	
8. CORRECTED DRAWINGS must be submitted.  (a) including changes required by the Notice of Draftspers  1) hereto or 2) to Paper No	son's Patent Drawing Review ( PTO-	.948) attached	
<ul><li>(b) ☐ including changes required by the proposed drawing correction filed, which has been approved by the Examiner.</li><li>(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No</li></ul>			
(c) I including changes required by the attached Examiner	s Amendment / Comment or in the C	mice action of Paper No	
Identifying indicia such as the application number (see 37 CFR 1. of each sheet. The drawings should be filed as a separate paper			
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR TO			
Attachment(s)			
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statements (PTO-1449), Paper No</li> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4☐ Interview Summa 6☐ Examiner's Amer	al Patent Application (PTO-152)  ary (PTO-413), Paper No  ndment/Comment  ement of Reasons for Allowance	

Application/Control Number: 09/747,521

Art Unit: 1645

## Attachment to Notice of Allowance

Page 2

1. Applicants' amendment, received 18 December 2003, paper #26 is acknowledged. The amendment has been entered. Claims 24, 26, 27, 31, 41, 42, 45-50 and 53 have been amended. Claims 23, 51 and 52 have been canceled. Applicants' exhibits A, B and C as requested by this office on the interview of 11/18/2003 (paper #25) are acknowledged.

2. Claims 24, 26, 27, 31, 41, 42 and 45-50 and 53 are pending.

# Objections Withdrawn

- 3. Objection to the specification made in paragraph 12 of the office action mailed 5/7/2003, paper #17 is withdrawn in view of applicants' corrections.
- 4. Objection to the specification made in paragraph 13 of the office action mailed 5/7/2003, paper #17 is withdrawn in view of applicants' arguments and corrections.

#### Rejections Withdrawn

- 5. Rejection of claims 23, 24, 26, 27, 31, 41 42 and 45-50 under 35 U.S.C. 112, first paragraph made in paragraph 14 of the office action mailed 5/7/2003, paper # 17 is withdrawn in view of applicants' amendments and exhibits.
- 6. Rejection of claims 23, 24, 26, 27, 31, 41 42 and 45-50 under 35 U.S.C. 112, first paragraph made in paragraph 15 of the office action mailed 5/7/2003, paper # 17 is withdrawn in view of applicants' amendments and exhibits.
- 7. Rejection of claims 23, 24, 26, 27, 31, 41, 42 and 45-50 under 35 U.S.C. 112, second paragraph made in paragraph 16 of the office action mailed 5/7/2003, paper # 17 is withdrawn in view of applicants' amendments.

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### Reason for Allowance

8. Claims 24, 26, 27, 31, 41, 42, 45-50 and 53 are allowed. Claims are renumbered 1-13 respectively.

The following is an examiner's statement of reasons for allowance:

Claims are drawn to an immunogenic composition comprising

- (a) a first polynucleotide that encodes a mutated *B. anthracis* lethal factor (LF) protein or a fragment thereof that encodes amino acid 42 to 285 of SEQ ID NO: 2, said first polynucleotide being operably linked to a promoter that drives expression of said LF protein of fragment thereof in cells of a mammalian subject, and
- (b) a second polynucleotide which encodes a B. *anthracis* protective antigen (PA) protein or a fragment thereof that encodes amino acid 204 to 764 of SEQ ID NO: 4, said second polynucleotide being operably linked to a promoter that drives expression of said PA protein or fragment thereof in cells of a mammalian subject wherein said LF protein or fragment thereof lacks metalloproteinase activity.

The prior art fails to teach such composition.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khatol Shahnan-Shah whose telephone number is (703) 308-

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8896. The examiner can normally be reached from 7:30 AM - 4 PM on Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette F Smith, can be reached on (703) 308-3909. The fax phone number for the organization where this application or proceeding is assigned to is (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Khatol Shahnan-Shah, BS, Pharm, MS

Biotechnology Patent Examiner

Art Unit 1645 December 28, 2003

RODNEY P SWARTZ, PH.D PRIMARY EXAMINER